

REMARKS

Reconsideration is respectfully requested of the rejection of claims 1-17 and 23 under 35 U.S.C. §103(a) as being unpatentable over Seo, et al. (6,030,627) in view of Golz-Berner et al. (6,309,627).

Certified copies of the priority documents, as well as English translations thereof, have been previously submitted in this case. It is believed that the submission of these documents perfects priority, i.e., entitles the present inventors to claim an effective filing date of August 16, 1990.

Both the Seo et al. and Golz-Berner, et al. cited references have filing dates and issue dates after the effective filing date of the present application, i.e., February 12, 1993, the filing date of parent application serial No. 07/969,176. Thus, it is believed that the cited references should not be considered prior art by the Examiner. In view of same, it is believed that the rejection is now moot. Nevertheless, the cited references, and the distinguishing characteristics of the present invention, shall be discussed below.

It is an object of the Seo, et al. reference to provide antimicrobial cosmetic pigments produced by forming an amorphous glass inorganic coating layer of metal oxides over the surface of

inorganic cosmetic pigments, such as mica. It further discloses  $\text{SiO}_2$  or a mixture of  $\text{SiO}_2$  as the coating layer, but does NOT disclose  $\text{SiO}_2$  as a non-porous, spherical coating layer. In particular, Example 9 therein discloses spherical silica as follows:



This composition, as shown above, does NOT provide silica as the coating layer of a flaky or scaly base, as claimed herein.

Furthermore, the diameter of the spherical silica particles disclosed in Example 9 are in a range of from 5-10  $\mu\text{m}$ , while the diameter of spherical silica particles coating the flaky, scaly base of the present invention are in a range of from 0.05-3  $\mu\text{m}$ . In addition, Seo, et al. allows for addition of the antimicrobial metal sources AFTER the primary coating with silica by adsorbing of the metal sources on the surface of the inorganic pigments.

The cited secondary reference of Golz-Berner, et al. reference discloses cosmetic compositions containing agglomerates with a particular particle size. The purpose of the inventors thereof was to provide a cosmetic composition with good spreading characteristics on the skin, without the agglomeration of

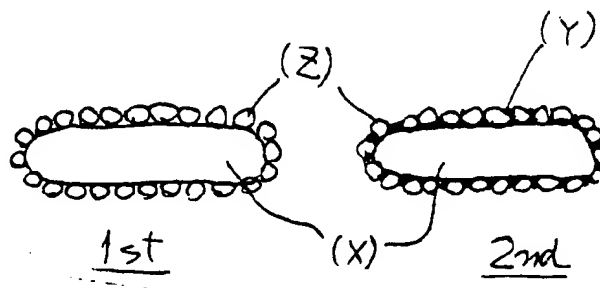
inorganic particles such as oxides, which tend to cause agglomeration of the composition and necessitate repeated rubbings on the skin to disperse same (see column 1, lines 10-40).

In particular, the compositions of the cited Golz-Berner, et al. reference comprise spherical non-porous  $\text{SiO}_2$  particles (A) and other inorganic particles (B), and both particles form agglomerates, as shown below:



In contrast, it is an object of the present invention to provide a means for reducing the glossiness of flaky, fine cosmetic bases caused by the irregular reflection of light on the surface thereof, to improve the slipperiness of the base, and to provide a means of production thereof. To achieve these objects, in contrast to the above cited references, the present invention provides a flaky, fine powder comprising a flaky base (X), and

non-porous spherical silica particles (Z) covering the surface of (X) (see claims 3 and 10). In addition, a second flaky, fine powder is provided comprising a flaky base (X), a hydrolysate of alkoxysilane and/or silica gel (Y), and non-porous spherical silica particles (Z). The surface of (X) is covered by (Y) and (Z), as shown below:



Importantly, the coating layer of the present invention comprises particles which have a spherical form deposited on a base having a flat grain size. Therefore, the surface of the flaky substrate is made uneven. Accordingly, the flaky, fine base substance, such as mica, has the unexpected and superior property of homogeneous light distribution as illustrated in Figs. 6-8 and 10, i.e., the glossiness is reduced and reflected light on the uneven surface of the substance is not partial to a certain angle and is distributed homogeneously.

This unexpected result was clearly demonstrated in the declaration under 37 CFR 1.132 filed in the parent application on May 22, 1996. In addition, the unexpected properties of the product of the present invention is illustrated in the new subject matter in this CIP application in Fig. 11 which shows that the silica particles are spherical and non-porous, and that there is no air void at the surface or in the spherical silica. It is respectfully submitted that these showings in the declaration and in the newly added subject matter herein clearly establish non-obvious patentable differences between the claimed product and the prior art compositions. It is also respectfully submitted that the submission of this evidence clearly rebuts any prima facie case of obviousness based on the prior art of record.

As the Examiner has correctly pointed out on page 3, paragraph 1, of the instant Office Action, the cited primary Seo, et al. reference fails to teach either the average particle size of the silica coating particles or the non-porous nature thereof, both factors of which are very important in achieving the object of the present invention. In addition, as discussed above, the spherical silica disclosed therein is NOT the coating layer of the base, but rather the inorganic cosmetic pigment.

Furthermore, as discussed above, the cited secondary Golz-Berner, et al. reference fails to disclose a composition having a physical structure similar to or the same as the composition as called for in the claims herein. Instead, an agglomerate is disclosed (as graphically illustrated above), which does not and cannot perform the functions of the composition of the present invention, which comprises a base coated with smaller spherical particles.

In response to the Examiner's comments with regards to the disclosure of "very good reflection of UV radiation" (page 3, paragraph 3, of the instant Office Action), it should be noted that Col. 1, lines 40-51, of the cited reference make no mention whatsoever of the prevention of glossiness of the composition on the skin. Rather, the reference appears to be referring to application of the composition in a sunscreen to merely generally reflect UV, does NOT mention that the reflection is homogeneous as herein and, if construed as meaning that the composition would greatly reflect UV without controlling the manner thereof, would likely actually achieve the OPPOSITE EFFECT of the present invention, i.e., would INCREASE glossiness.

The Examiner has also correctly recognized the failure of both of the cited references to disclose the permittivity of the dispersion, as claimed herein. In an effort to obviate this lack of

disclosure, the Examiner maintains that this claimed element is inherent in the cited references. However, as pointed out above, in fact neither of the cited references disclose the composition called for herein.

Namely, there is no disclosure whatsoever of "a flaky, fine powder comprising a flaky or scaly base having a thickness of about 1  $\mu\text{m}$  or less and selected from the group consisting of mica, talc and platelet shaped silica; and spherical silica particles comprised of  $\text{SiO}_2$  or a mixture of  $\text{SiO}_2$  with one or more of  $\text{Al}_2\text{O}_3$ ,  $\text{ZrO}_2$ ,  $\text{MgO}$ ,  $\text{ZnO}$ ,  $\text{CeO}_2$  or  $\text{Fe}_2\text{O}_3$ , and said spherical silica particles being non-porous and having an average particle size of 0.05-3  $\mu\text{m}$  and covering the surface of said flaky or scaly base", as called for in claim 3 herein. Thus, it is believed that a conclusion of inherency is impossible.

In essence, it is respectfully submitted that neither of the cited references disclose non-porous spherical silica particles having an average particle size of 0.05-3  $\mu\text{m}$  deposited on and immobilized on a flaky or scaly base having a thickness of about 1  $\mu\text{m}$  or less, which provides the permittivity of the dispersion called for herein, and which is produced by the methods claimed herein. On the contrary, those teachings or suggestions come only from the present application and constitute important elements or aspects of the present invention.

In conclusion, in view of the deficiencies of the cited references, as pointed out above, it is respectfully submitted that it would NOT have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of the two cited references to achieve the composition of the present invention. This conclusion is based largely on the fact that the cited primary Seo, et al. reference fails to disclose coating a flaky, fine base with spherical, non-porous silica with the claimed characteristics herein, such as the homogeneous light distribution achieved and demonstrated with the present invention, and the teaching relied upon by the Examiner in the cited Golz-Berner, et al. reference of UV light reflectivity is NOT believed to be comparable to the homogeneous light distribution provided herein. Thus, withdrawal of the rejection is accordingly respectfully requested.

In view of the foregoing, it is respectfully submitted that the application is now in condition for allowance, and early action and allowance thereof is accordingly respectfully requested. In the event there is any reason why the application cannot be allowed at the present time, it is respectfully requested that the Examiner contact the undersigned at the number listed below to resolve any problems.